

Listing of Claims:

We claim:

1. Canceled.
2. (Currently Amended) The image management system as recited in claim 4-33 which includes a database management means-system responsive to the ~~determination made~~reaction object produced by the business rules processor to store the metadata in a database when the satisfied rule is related to the store category.
3. (Currently Amended) The image management system as recited in claim 4-33 which includes an enterprise authority manager coupled to the means for receiving, the enterprise authority manager storing information on ~~each~~a plurality of image producing devices authorized to store images in the image management system, and being operable to determine if a message received over the network is from an authorized image producing device.
4. (Original) The image management system as recited in claim 3 in which the enterprise authority manager stores information indicative of the data type appropriate for an authorized image producing device.
5. (Original) The image management system as recited in claim 4 in which the means for receiving also includes means for receiving messages over the network from users requesting access to stored images and associated stored metadata, and in which the enterprise authority manager stores information indicative of authorized users.
6. (Original) The image management system as recited in claim 5 in which the enterprise authority manager is operable to deny access to unauthorized users.

7. (Currently Amended) The image management system as recited in claim 4-33 in which the business rules processor includes a plurality of stored rules which identify different actions to be performed and each identifies a set of parameters which must be present for the rule to be satisfied, ~~wherein the different actions include storage of associated image data in each one of said plurality of storage devices.~~

8. (Original) The image management system as recited in claim 7 in which one of said parameters is the identity of the image producing device.

9. (Original) The image management system as recited in claim 7 in which one of the parameters is the location of the image producing device.

10. (Original) The image management system as recited in claim 7 in which the image producing devices include medical imaging systems and one of said parameters is the imaging modality.

11. (Original) The image management system as recited in claim 10 in which one of said parameters is the subject of the image.

12. (Original) The image management system as recited in claim 7 in which one of said parameters is the subject of the image.

13. (Currently Amended) The image management system as recited in claim 2-33 in which the metadata further includes information ~~regarding-related to at least one~~ of the patient, a patient study, a series, a patient body part, an imaging modality, and a procedure type.

14. (Original) The image management system as recited in claim 2 which includes an audit log stored in the database and the database management system is operable to record in the audit log information related to the metadata stored in the database.

15. (Previously Presented) The image management system as recited in claim 14 in which the information related to the metadata includes the dates on which the metadata is accessed and the identities of requesting users.

16. (Currently Amended) An image management system connected to receive messages which contain image data and associated metadata from an image producing device, which comprises:

a plurality of storage devices, where at least one of the each storage devices having has a cost and operating characteristics which that differs from the cost characteristics of the other storage devices;

means connected to receive the messages and a request message, wherein the request message includes a storage request category;

processor means coupled to the means for receiving and being operable to examine metadata in received messages and parameters in a set of stored rules related to the request category to determine in which of said plurality of storage devices the associated image data should be stored when the set of stored rules is related to the store category; and

means for storing the associated image data in the storage device determined by the processor means.

17. (Original) The image management system as recited in claim 16 in which one of the plurality of stored rules identifies one of said plurality of storage devices and one or more parameters that must be satisfied to store image data in that storage device.

18. (Original) The image management system as recited in claim 17 in which one of said parameters is the subject of the image and the metadata indicates the subject of its associated image data.

19. (Original) The image management system as recited in claim 17 which includes a workstation coupled to the processor means for enabling a user to input and edit said stored rules.

20. (Currently Amended) The image management system as recited in claim 17 in which:

the request message further includes a restore request category;

the processor means is operable, when stored rules related to the restore request category are satisfied, to produce a subsequent request message indicating that the image data is to be transferred to another one of said storage devices at a later time; and

in which the image management system also further includes:

a persistent messaging service coupled to the processor means and being operable to store said message to be acted upon at a later time; and

means for acting on the stored message at said later time to transfer said image data to said another one of said storage devices.

21. (Original) The image management system as recited in claim 16 which includes a database management system coupled to the processor means and being operable to store the metadata in a database.

22. (Original) The image management system as recited in claim 21 which includes an audit log stored in the database and the database management system is operable to record in the audit log information related to the metadata stored in the database.

23. (Original) The image management system as recited in claim 22 in which the information related to the metadata includes the date on which the metadata is accessed and the identity of the requesting user.

24. (Currently Amended) A method for storing images produced by a plurality of medical imaging devices located in a ~~health-care~~healthcare enterprise, the steps comprising:

- a) electronically sending, to an image management system:
 - i) each an image produced by a medical imaging device; to an image management system along with
 - ii) associated-metadata associated with the image, that wherein the metadata includes information about the image; and
 - iii) a message that includes a request category, wherein the request category includes at least one of a store category, a retrieve category, and a restore category;
- b) storing a set of rules in the image management system which indicates how images for the ~~health-care~~healthcare enterprise are to be stored, wherein the set of rules includes rules corresponding to the store, retrieve, and restore categories;
- c) evaluating a stored rule selected from the request category by examining the metadata associated with each image received by the image management system;
- d) storing-transferring the received-image in a manner indicated by a rule which is evaluated as satisfied; and
- e) storing the associated-metadata associated with the image in a database.

25. (Currently Amended) The method as recited in claim 24 in which step c) is performed by comparing parameters in ~~a-the~~ selected stored rule with information in the ~~associated-metadata~~ associated with the image to determine if the rule is satisfied.

26. (Original) The method as recited in claim 25 in which the parameters include the modality of the medical imaging device that produced the image.

27. (Currently Amended) The method as recited in claim 25 in which the parameters include the location within the ~~health-care~~healthcare enterprise of the medical imaging device that produced the image.

28. (Original) The method as recited in claim 25 in which the parameters include the subject matter depicted in the image.

29. (Currently Amended) The method as recited in claim 24 in which step d) includes storing the image in one of a plurality of different storage devices, each wherein at least one of the storage devices has a having different cost and performance characteristics different than the cost characteristics of the other storage devices.

30. (Currently Amended) The method as recited in claim 24 which includes:
f) changing the stored rules to reflect a change in the image storage policy of the ~~health-care~~healthcare enterprise.

31. (Original) The method as recited in claim 30 in which step f) is performed by:

- i) entering rule data at a workstation; and
- ii) electronically sending the rule data to the image management system.

32. (Currently Amended) The method as recited in claim 24 in which step d) includes:

storing the image in one of a plurality of different storage devices; and
storing a message that includes a request category, which indicates the image is to be transferred to another of said storage devices at a later time.

33. (New) An image management system connected to receive messages over a healthcare enterprise network, the image management system comprising:

- a plurality of storage devices, where at least one of the storage devices has a cost characteristic that differs from the cost characteristics of the other storage devices;
- means for receiving, over the network, a message that includes:
 - a request category, wherein the request category includes at least one of a store category, a retrieve category, and a restore category; and
 - at least one parameter extracted from metadata that includes information related to at least one of acquired image data, stored image data, and patient information;
- a business rules processor communicatively coupled to the means for receiving that is operable to:
 - identify, from the received message, a set of stored rules related to the request category;
 - determine at least one rule in the identified set of stored rules that is satisfied by processing the at least one parameter in the received message in accordance with each rule in the identified set of stored rules; and
 - produce a reaction object for the satisfied rule; and
- archiving means responsive to the produced reaction object to:
 - store at least one of image data and patient information corresponding to the metadata in at least one of the plurality of storage devices when the satisfied rule is related to the store category;
 - retrieve at least one of image data and patient information corresponding to the metadata from at least one of the plurality of storage devices when the satisfied rule is related to the retrieve category; and
 - transfer at least one of image data and patient information corresponding to the metadata from at least one of the plurality of storage devices to another of the plurality of storage devices when the satisfied rule is related to the restore category.